

MANURE, LITTER, & BEDDING MANAGEMENT

BIOSECURITY TIP SHEET



Manure, litter, and bedding can be good for the soil, but can also contain disease causing germs. Safe handling can help prevent animal and human disease. Local and state rules on manure disposal must be followed.

The type of bedding used will depend on a variety of factors including costs and what is available in your area. Using the right bedding type and proper handling are important to prevent and control disease on your operation.

EQUIPMENT

- Separate equipment should be used for manure/litter and fresh bedding handling. This includes tractors, skid loaders, truck beds, shovels, and pitch forks.
- Avoid sharing equipment with other operations that has been used to handle manure and soiled bedding or litter.
- If the same equipment is used for manure, soiled bedding or litter and feed, it must be fully cleaned and disinfected between uses.



Skid loader used only for manure and soiled bedding handling.
Source: Hope Dohman, Iowa State University

ANIMAL HOUSING AREAS

- Remove manure, dirty bedding/litter often from livestock holding areas. Keeping pens clean and dry will reduce disease spread by hooves, boots, and equipment.
- Keep young animals away from manure, bedding and litter from older animals.
- Clean maternity areas between births. This prevents newborns from contacting germs left behind in the manure of other animals.
- Disturbing manure weekly can help prevent insect eggs from hatching. Drag pastures and dry lots to break up manure piles. If spreading manure in other areas, apply it in thin layers onto pasture. If manure is stored, unless a hard crust forms, eggs can still be laid and hatch.

STORAGE AND REMOVAL

- Follow local and state rules for manure and bedding disposal to prevent harm to the environment.
- Keep dogs, cats, and wildlife away from manure and soiled bedding or litter areas.
- Prevent manure and used bedding from contacting water sources. Keep manure-tainted runoff away from animal areas.
- If you cannot spread manure and soiled bedding right away, compost it to destroy disease causing germs.
- Do not spread or transport manure or soiled bedding after a disease outbreak. Contact your veterinarian or extension specialist first about safe ways to handle it.



A compost pile that is stored away from any feed sources.
Source: Daniel Blume/Flickr
(<https://flic.kr/p/6pHC9d>) CC BY-SA 2.0

BEDDING

- Use bedding materials that are clean, comfortable, and able to absorb liquid. Avoid dusty materials as these damage animal and people's nasal passages.
- Purchase bedding material from reputable suppliers with a program designed to prevent the spread of infectious diseases.
- Store bedding so that it stays clean and dry. Discourage rodents and other vermin from getting into bedding storage areas.
- Straw should come from sources that do not allow grazing by other livestock before harvest.
- Clean and disinfect trailers and apply fresh, clean bedding before moving livestock.



A clean housing area with fresh bedding.
Source: *The Donkey Sanctuary/Flickr*
(<https://flic.kr/p/bCG2Yz>) CC BY-NC-SA 2.0

ASSESSMENT CHECKLIST

Use the following checklist to determine areas where you are doing well and others that need to improve.

YES	NO	After answering, pick one or two "No" answers and make an improvement plan with the resources below.
		Is animal housing regularly maintained to prevent manure, litter or soiled bedding buildup?
		Do you prevent young animals from coming in contact with manure and soiled bedding from older animals?
		Do you purchase/use bedding from trustworthy sources with a quality control program?

MORE RESOURCES:

[Bedding Options for Livestock and Equine](#). University of Massachusetts Extension

[Composting Manure. Small Scale Solutions for your Farm](#). National Resources Conservation Service.

[Manure Handling](#). Heathly Farms Healthy Agriculture.

ACKNOWLEDGMENTS

Development of this material was made possible through grants provided to the Center for Food Security and Public Health at Iowa State University, College of Veterinary Medicine from the U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service through the National Animal Disease Preparedness and Response Program (NADPRP) and National Institute of Food and Agriculture, under award number AWD-021794-00001 through the North Central Region SARE program under project number ENC19-176. USDA is an equal opportunity employer and service provider. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the USDA. Iowa State University is an equal opportunity provider. For the full non-discrimination statement or accommodation inquiries, go to extension.iastate.edu/diversity/ext.